

New Claims

1. A device for detecting the manner in which a vehicle seat is occupied, a stereoscopic image recording device having at least one optical sensor (3, 4, 13) recording the scene at the vehicle seat (2), and deriving from it a three-dimensional map (21, 25) partitioned into a plurality of zones, indicating for each zone the distance from a reference point, wherein the at least one optical sensor (3, 4, 13) has a nonlinear transducer characteristic curve, describing the correlation between the incident light intensity (L) and its electrical output signal (U, I), whose characteristic curve steepness decreases with increasing light intensity (L).
2. The device as recited in Claim 1, wherein the transducer characteristic curve has a logarithmic shape.
3. The device as recited in Claim 1, wherein two optical sensors (3, 4), arranged at a defined distance from each other, simultaneously record the scene on the vehicle seat (2).
4. The device as recited in Claim 1, wherein a stereooptical instrument (14) takes two images of the vehicle seat (2), offset by a defined distance from each other, on a single optical sensor (13).
5. The device as recited in Claim 1, wherein a light source (10) is present for illuminating the scene on the vehicle seat (2), which shines light synchronously with the activation of the image recording device (3, 4, 13).

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6. The device as recited in Claim 5,  
wherein the light source (10) shines light in the infrared  
range.
7. The device as recited in Claims 1, 5 and 6,  
wherein an infrared band-pass filter (12) is arranged in  
front of the at least one optical sensor (3, 4, 13).
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